WHAT IS CLAIMED IS:

1. An angiographic injector arrangement comprising:

(a) a remote control generating a remote control signal for indicating a desired fluid discharge rate; said fluid discharge rate being continuously variable between a preset maximum value and a minimum value, selected by said remote control signal;

(b) a computer coupled to said remote control; said computer regulating a motor control voltage in response to said remote control signal;

(c) a syringe for discharging a fluid; and

(d) a syringe drive motor coupled to said computer and coupled to said syringe; said drive motor causing fluid to discharge from said syringe at said desired discharge rate in response to said motor control voltage.

2. An injector arrangement according to claim 1, wherein

(a) said syringe includes:

(i) a cylinder;

(ii) an inlet port for connection to a supply of fluid;

(iii) an outlet port for connection to a patient; and

(iv) a plunger movable in said cylinder and driven by said drive motor.

3. An injector arrangement according to claim 1, wherein:

(a) said remote control includes a handheld device having an actuator for generating said signal.

4. An injector arrangement according claim 1, wherein:

(a) said remote control includes a foot operated device having an actuator for generating said signal.

5. An injector arrangement according to claim 1, wherein:

(a) said computer receives an ECG signal derived from a patient and coordinates operation of said syringe with the ECG signal.

6. An injector arrangement according to claim 1, further comprising:

(a) a low pressure system; and

(b) a manifold including:

(i) a manifold shell;

(ii) a first port in fluid communication with said syringe;

(iii) a second port in fluid communication with a patient; and

(iv) a third port in fluid communication with said low pressure system.

7. An injector arrangement according to claim 6, wherein:

(a) said manifold includes a valve having a first state and a mutually exclusive second state;

(i) said first state being when the second and third ports are connected, and said first and third ports are always disconnected; and

(ii) said second state being when the first and second ports are connected, and said first and third ports are always disconnected.

8. An injector arrangement according to claim 7, wherein:

(a) said valve is normally biased to the first state and is switchable to the second state when fluid pressure from said syringe reaches a predetermined pressure level.

9. An injector arrangement according to claim 8, wherein:

(a) said valve includes a spring-biased spool valve.

10. An injector arrangement according to claim 6, wherein:

(a) said low pressure system includes:

(i) a pressure transducer in fluid communication with said third port; and

(ii) a pump in fluid communication with said third port.

11. An injector arrangement according to claim 6, wherein:

(a) said manifold includes a valve having a first state and a mutually exclusive second state;

(i) said valve is constructed and arranged to be passively biased to said first state.

12. An injector arrangement according to claim 6, wherein said manifold further comprises:

(a) a manifold wiper, said manifold wiper including at least two ridges which contact an inner surface of said manifold shell.

13. An injector arrangement according to claim 12, wherein said manifold shell includes at least one protrusion along said inner surface of said manifold shell which can interdigitate with said at least two ridges of said manifold wiper.

14. An injector arrangement according to claim 6, wherein said second port is in fluid communication with an inner surface of said manifold shell through a multipartate port opening.

15. An injector arrangement according to claim 6, wherein said second port includes an oscillation reduction port.

16. An injector arrangement according to claim 6, wherein said third port is in fluid communication with an inner surface of said manifold shell through a multipartate opening port.

17. An injector arrangement according to claim 6 wherein said manifold shell includes an inner surface having a cone shape at one end of said manifold shell.

18. An injector arrangement according to claim 17 wherein said end of said manifold shell further includes a wedge shaped annular ring.

19. An injector kit for an angiographic injector system, said kit comprising:

(a) a syringe, said syringe comprising:

(i) a syringe body having a distal end and a proximal end; the syringe body defining a pumping chamber and an inlet port;

(ii) a syringe end wall located at the distal end of said syringe body having a flat face for the mating engagement with the syringe holder; said end wall defining an outlet port; and

(iii) a syringe plunger located in said pumping chamber adapted for reciprocal motion between a position proximate to said proximal end and said distal end.

20. An injector kit according to claim 19 further comprising:

(b) a manifold, said manifold including:

(i) a manifold shell;

(ii) a first port in fluid communication with said syringe;

(iii) a second port in fluid communication with a patient; and

(iv) a third port connectable to a low pressure system.

21. An injector kit according to claim 20, further comprising:

(b) a patient tube;

(c) a low pressure tube; and

(d) a flush tube.

22. The angiographic injector kit according to claim 21 further comprising a patient catheter.

23. A method for automatically refilling a syringe for an angiographic injector arrangement, said method comprising:

- sensing a volume of fluid in a chamber of said syringe;

- comparing said volume in said chamber with a preset amount of fluid necessary for a subsequent injection;

- retracting a plunger within said chamber of said syringe to a predetermined limit if the preset amount of fluid necessary for a subsequent injection is less than the volume of fluid sensed in said chamber.

24. The method according to claim 23 wherein said predetermined limit maximally fills said chamber of said syringe.

25. The method according to claim 23 wherein said predetermined limit is less than a maximal volume of said chamber.

26. The method according to claim 23 further comprising a step of purging air from said chamber of said syringe.